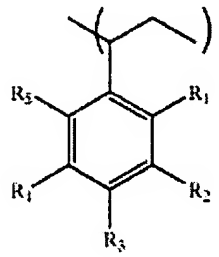
CLAIMS

What is claimed is:

1. A method for plating, comprising:

coating a substrate with a barrier layer, wherein the barrier layer comprises an adhesive composition comprising a polyphenolic polymer, said polyphenolic polymer comprising repeating monomeric units having the formula:



wherein each of R_1, R_2, R_3, R_4, and R_5 are each individually a hydroxy group, hydrogen, or an azo dye moiety;

coating the barrier layer with a top layer comprising a photoresist;

imagewise exposing the top layer to radiation;

removing the exposed portion of the top layer for exposing a portion of the barrier layer;

removing the exposed portion of the barrier layer for exposing a portion of the substrate; and

plating a material on the exposed portion of the substrate.

2. A method as recited in claim 1, wherein the substrate includes a seed layer, the barrier layer being formed on the seed layer.

3. A method as recited in claim 1, wherein the barrier layer comprises 100% of the polyphenolic polymer.

4. A method as recited in claim 1, wherein the barrier layer is spin coated on the substrate.

5. A method as recited in claim 1, wherein the barrier layer is substantially formed in a monolayer.

6. A method as recited in claim 1, wherein only one of R_1, R_2, R_3, R_4, and R_5 is hydroxyl.

7. A method as recited in claim 1, wherein the exposed portion of the top layer is removed using a developer.

8. A method as recited in claim 7, wherein the developer also removes the exposed portion of the barrier layer.

9. A method as recited in claim 7, wherein the developer does not remove the exposed portion of the barrier layer.

10. A method as recited in claim 9, wherein the exposed portion of the barrier layer is removed by reactive ion etching.

11. A method as recited in claim 9, wherein the exposed portion of the barrier layer is removed by milling.

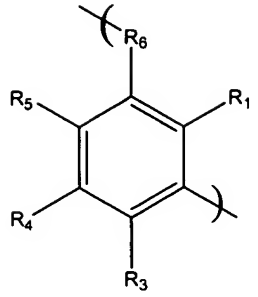
12. A method as recited in claim 1, wherein removal of the exposed portion of the barrier layer does not create undercuts under the photoresist.

13. A method as recited in claim 1, wherein removal of the exposed portion of the barrier layer creates undercuts under the photoresist.

14. A method as recited in claim 1, wherein the barrier layer also functions as an antireflective coating.

15. A method for plating, comprising:

coating a substrate with a barrier layer, wherein the barrier layer comprises an adhesive composition comprising a polyphenolic polymer, said polyphenolic polymer comprising repeating monomeric units having the formula:



wherein each of R_1, R_3, R_4, and R_5 are each individually a hydroxy group, hydrogen, or an substituted azo group and R_6 is a methylene or substituted methylene group;

coating the barrier layer with a top layer comprising a photoresist;

imagewise exposing the top layer to radiation;

removing the exposed portion of the top layer for exposing a portion of the barrier layer;

removing the exposed portion of the barrier layer for exposing a portion of the substrate; and

plating a material on the exposed portion of the substrate.

16. A method as recited in claim 15, wherein the substrate includes a seed layer, the barrier layer being formed on the seed layer.

17. A method as recited in claim 15, wherein the barrier layer comprises 100% of the polyphenolic polymer.

18. A method as recited in claim 15, wherein the barrier layer is spin coated on the substrate.

19. A method as recited in claim 15, wherein the barrier layer is substantially formed in a monolayer.

20. A method as recited in claim 15, wherein only one of R_1, R_3, R_4, and R_5 is hydroxyl.

21. A method as recited in claim 15, wherein the exposed portion of the top layer is removed using a developer.

22. A method as recited in claim 21, wherein the developer also removes the exposed portion of the barrier layer.

23. A method as recited in claim 21, wherein the developer does not remove the exposed portion of the barrier layer.

24. A method as recited in claim 23, wherein the exposed portion of the barrier layer is removed by reactive ion etching.

25. A method as recited in claim 23, wherein the exposed portion of the barrier layer is removed by milling.

26. A method as recited in claim 15, wherein removal of the exposed portion of the barrier layer does not create undercuts under the photoresist.

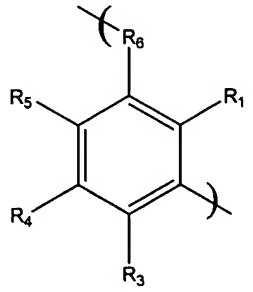
27. A method as recited in claim 15, wherein removal of the exposed portion of the barrier layer creates undercuts under the photoresist.

28. A method as recited in claim 15, wherein the barrier layer also functions as an antireflective coating.

29. A magnetic storage system, comprising:
magnetic media;
at least one head for reading from and writing to the magnetic media, each head having:
a write head portion; and
a read head portion coupled to the write head portion;
wherein a portion of at least one of the read head portion and the write portion is formed by the method of claim 1;
a slider for supporting the head; and
a control unit coupled to the head for controlling operation of the head.

30. An adhesive composition, comprising:

an adhesive composition comprising a polyphenolic polymer, the polyphenolic polymer comprising repeating monomeric units having the formula:



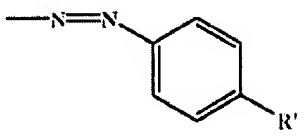
wherein each of R_1, R_3, R_4, and R_5 are each individually a hydroxy group, hydrogen, or a substituted azo group and R_6 is a methylene or substituted methylene group.

31. An adhesive composition as recited in claim 30, wherein only one of R_1, R_3, R_4, and R_5 is hydroxyl.

32. An adhesive composition as recited in claim 30, wherein the polymer comprises second repeating units which are different.

33. An adhesive composition as recited in claim 30, wherein the polymer comprises first and second repeating units which are monoazo dyes.

34. An adhesive composition as recited in claim 33, wherein the monoazo dye has the formula:



wherein R' is an alkyl moiety, an alkoxy moiety, or a carboxylate moiety.

35. An adhesive composition as recited in claim 34, wherein the monoazo dye has the formula:

wherein R" is a hydrogen, an alkyl moiety, an alkoxy moiety, or a carboxylate moiety.